INCH-POUND
ATPD-2344
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SUPERSEDING
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18 May 1998

PURCHASE DESCRIPTION
TANK, COLLAPSIBLE, SELF-SUPPORTING, DRINKING WATER STORAGE, 3000 U.S. GALLONS

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers collapsible, self-supporting, 3000 gallon tanks for temporary storage of drinking water in support of tactical water purification equipment.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Petroleum & Water Business Area, U.S. Army RDECOM, ATTN: AMSRD-TAR-D, Warren, MI 48397-5000 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing as an attachment at the end of this document, or by letter.

AMSC N/A FSC 5430

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SPECIFICATONS

(Includes changes made 16 Nov 2005 for the purposes of RFP W56HZV-04-R-1101)

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

FEDERAL

A-A-59326 - Coupling Halves, Quick-Disconnect, Cam-Locking Type

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

STANDARDS

FEDERAL

FED-STD-595 - Colors used in Government Procurements

DEPARTMENT OF DEFENSE

MIL-STD-810 - Environmental Engineering Considerations and Laboratory Tests

(Unless otherwise indicated, copies of federal and military specifications, standards, and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.2.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications from a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

PURCHASE DESCRIPTIONS

ATPD-2263 - Repair Kit and Repair Kit Components for Collapsible Fabric, Tanks, Drums, And Boats.

Copies are available from the office of the Contracting Officer.

U.S. ARMY PAMPHLETS

DA Pam 611-21 - Military Occupational Classification and Structure.

Copies are available from the office of the Contracting Officer. Some are also available on-line at http://www.usapa.arm.mil

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN PUBLIC HEALTH ASSOCIATION, INC. (APHA)

Standard Methods for the Examination of Water and Waste Water

Part 207 - Odor

Part 211B - Taste

(Application for copies should be addressed to the American Public Health Association, Inc., 1015 18th St. NW, Washington, DC 20036.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM D 751 - Standard Test Methods for Coated Fabrics

ASTM D 1149 - Standard Test Method for Rubber Deterioration –Surface Ozone Cracking in a Chamber

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia PA 19103.)

NATIONAL SANITATION FOUNDATION (NSF)

Standard 61 - Drinking Water System Components –Health Effects

(Application for copies should be addressed to the National Sanitation Foundation, 3475 Plymouth Rd., P.O. Box 1468, Ann Arbor, MI 48106.)

2.4 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 The tank assembly shall consist of a tank complete with handles, fittings, ground cloth, packaged repair items, instruction manual, and a carrying valise with handles. To reduce weight and cost the ground cloth may serve as the valise. The tank assembly shall be for storage of drinking water. The tank assembly shall concurrently meet or exceed all the requirements herein.

3.2 First article. Unless otherwise specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.2.1.

3.3 Materials.

3.3.1 Material properties.

3.3.1.1 Puncture resistance. The tank and ground cloth material shall have a puncture resistance of at least 150 lbs when tested in accordance with ASTM-D751.

3.3.1.2 Ozone resistance. The tank, valise and ground cloth shall be constructed from ozone resistant materials.

3.3.2 Potability. The tank assembly shall contain no materials or substances that might leach out or deteriorate and contaminate the stored drinking water. Materials shall have no adverse effect on the health of personnel when used for intended purposes (drinking). All surfaces that come in contact with, or may come in contact with, the drinking water shall be tested or listed as approved for use with potable water by the National Sanitation Foundation (NSF-STD-61).

3.3.3 Material deterioration prevention and control. The tank assembly shall be fabricated from compatible materials, inherently corrosion resistant or treated to provide protection against various forms of corrosion or deterioration under conditions stated herein.

3.3.4 Recycled, recovered, or environmentally preferable materials. Recycled, recovered (see 6.5.1), or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds operational and maintenance requirements, and promotes economically advantageous life cycle costs. Used, rebuilt, or re-manufactured components, pieces, and parts shall not be used.

3.3.5 Material imperfections. The tank assembly materials shall be free of any imperfections that may affect tank assembly performance, and if applicable, shall be free from blisters (see 6.5.2), holidays (see 6.5.3), or pinholes (see 6.5.4) and shall show no sign of coating delamination.

3.3.6 Chemical resistance. The tank assembly shall be resistant to chlorine and sodium bisulfite at concentrations resulting from controlled usage levels normally used in drinking water applications. Tank assembly shall also be resistant to chemicals such as bleach in concentrations used for cleaning and for sterilization purposes.

3.3.7 Tank assembly weight. The tank assembly as defined in 3.1 shall have a total packaged weight of not more than 140 pounds.

3.3.8 Taste and odor. The tank assembly materials that contact, or may come in contact with, the drinking water shall conform to APHA Standards and Methods for Examination of Water and Waste Water, parts for Taste (211B) and Odor (207). The material shall not impart odor to chlorinated water such that the threshold odor number exceeds 2. The material shall not impart taste to chlorinated water such that the taste rating scale exceeds 4.

3.4 Construction.

3.4.1 Inflatable compartments. The tank shall not incorporate any compartment that requires inflation with air.

3.4.2 Handles. The tank and valise shall be provided with handles for handling ease during deployment and setup. Each handle bond shall be able to withstand a minimum tensile force equivalent to two and a half (2.5) times the weight of the fully packaged tank assembly without damaging the tank and valise.

3.4.3 Fittings. Unless otherwise specified, the tank shall be furnished with one female and one male 2 inch fitting positioned at ground level and 180 degrees from one another. Both ground level fittings shall have a tethered dust plug / dust cap. There shall also be a 2 inch female filler/chemical introduction fitting near the top of the tank not associated with or impeding the tank cover, that shall include a tethered dust plug. The top fitting shall be a 2 inch female cam-lock that can be directed either up or down allowing convenient hose connections or adding chemicals to the tank. All fittings shall be quick-disconnect / cam-locking in accordance with A-A-59326, Class SS, Style 1.

3.4.4 Valve assemblies. Two valve assemblies shall be provided with each tank. Each assembly shall consist of one 2 inch, ¼ turn ball valve, one 2-inch male and one 2-inch female quick disconnect cam-lock coupling in accordance with A-A-59326, Class SS, Style 1.

3.4.5 Storage/carrying valise. The valise shall be used to store the complete tank assembly and permit carrying thereof. The valise shall be provided with handles to permit a four-person carry.

3.4.6 Package size. A fully packaged tank assembly stowed in its valise shall fit in a 30 x 30 x 45 inches space without excessive effort and/or damage to any of its items.

3.4.7 Sand. The tank assembly shall perform as specified herein, in a blowing sand environment when subjected to a minimum sand concentration of 0.062 ± 0.015 gram per cubic foot (g/ft^3) at a minimum wind velocity of 3540 feet per minute (ft/min).

3.4.8 Ground cloth. A ground cloth shall be provided with each tank. The ground cloth shall extend a minimum of 12 inches beyond the tank perimeter.

3.4.9 Footprint. The tank assembly shall be deployable within an area 13 x 13 feet.

3.4.10 Tank assembly. The tank assembly shall not allow rainwater to accumulate on the tank to the point were it interferes with the operation of the tank or the operator. The tank assembly shall prevent rainwater from entering the tank.

3.4.10.1 Sample extraction. A means shall be provided for taking water samples at all levels of fill. Water sampling shall not require any tools.

3.4.10.2 Chemical introduction for cleaning and sterilizing. A means shall be provided for allowing the pouring of disinfectants and cleaning agents into the partially filled (25% to 50% of capacity) tank and mixing.

3.4.11 Cleaning capability. A means shall be provided to allow for thorough cleaning and sanitization of all surfaces of the tank.

3.4.12 Cover or opening. If the tank design includes a cover that is removable, the function of removing and reinstalling the cover shall be completed by one person without the use of any tool. If the tank design includes an opening that opens and closes, the function of opening and closing the tank shall be completed by one person without the use of any tool.

3.5 Tank Performance.

3.5.1 Capacity. The tank shall have a rated capacity of 3000 U.S. gallons. The tank shall be capable of storing any volume 0 through 100% of capacity, and shall be capable of holding up to 150% of capacity for testing purposes.

3.5.2 Cycling. The tank assembly shall withstand continuous cycling within tank fill capacity range without operator intervention other than valve operation.

3.5.3 Stability. The tank shall be deployable on an incline of up to 10% (10 feet per 100 feet), in any orientation, and shall not collapse, creep or overturn.

3.5.4 Environmental exposure. The tank assembly shall be suitable for service in ambient temperatures ranging from -25° to 125° F with continuous exposure to direct sunlight, rain, sleet, hail, snow and sand storms in any combination thereof.

3.5.5 Long term storage. A fully packaged tank assembly shall withstand folded storage at ambient temperatures ranging from –28° to 160° F and within a relative humidity range of 10% to 90% without damage for a minimum of 10 years.

3.5.6 Drop capability. A fully packaged tank assembly within its valise shall be capable of being dropped from a height of six (6) feet onto a hard surface without resulting in any damage.

3.6 Repair kit. A repair kit in accordance with ATPD 2263, Type II shall be provided.

3.7 Identification marking. The tank shall have the following permanent markings:

3.7.1 Nameplate. The tank shall have an identification nameplate marking that includes all the information listed below and shall be visible through all levels of fill. The valise shall have the same marking visible when fully packed. The nameplate shall be printed in 0.5-inch high, minimum, lettering of a contrasting color to the background.

TANK, COLLAPSIBLE, SELF-SUPPORTING
3000 U.S. GALLONS, DRINKING WATER
NSN: (Specify)
SERIAL NO: (Specify)
MFR: (manufacturer's name and location of plant)
WEIGHT EMPTY: (Specify number of pounds)
CONTRACT OR ORDER NO: (Specify)
LOT: (Specify)
DATE OF MANUFACTURE: (Specify month and year)

3.7.2 Use marking. The tank shall be marked "DRINKING WATER ONLY" in 4.0 inch high, uppercase lettering.

3.7.3 Max fill marking. The tank shall have a max fill (rated capacity) marking that is clearly visible and easily interpretable from around the entire perimeter of the tank.

3.8 Manpower requirement. The tank assembly design shall permit deployment thereof by a maximum of four persons, and only require a maximum of one person to perform all other operations after initial deployment. Persons are as defined by DA PAM 611-21; Military Occupational Specialty (MOS) 77W (Water Supply Specialist).

3.9 Tools requirement. No tools shall be required for tank assembly deployment, assembly, and operation thereof.

3.10 Color. Unless otherwise specified (see 6.2), the tank assembly components shall have an exterior color in accordance with FED-STD-595, color chip 33446 (sand matte), general match. All surfaces normally painted shall be cleaned, treated, and painted in accordance with the manufacturer's standard commercial practice.

4. VERIFICATION

4.1 Classification of inspections. Inspections shall be classified as follows:

a. First Article (FA) inspection (see 4.2.1).
b. Conformance inspection (see 4.2.2).

These inspections have been designed to detect nonconformance to the requirements specified in section 3. Passing the inspections does not necessarily imply that the requirements have been met in full. The contractor is responsible for meeting or exceeding all the requirements specified in section 3 herein.

4.1.1 Fabricated samples for inspection. Fabricated samples shall be prepared using the same materials, processes, production personnel, and equipment used in fabrication of the tank material. Laboratory samples shall not be acceptable (samples produced in a testing facility or by test or quality control personnel using production equipment). The contractor shall ensure that the fabricated samples are representative of the corresponding production tank or first article tank.

4.2.1 First article inspection.

4.2.1.1 First Article. When a first article inspection is required, it shall be performed on one (1) initial production complete tank assembly in accordance with 4.2.1.2.

4.2.1.2 First Article inspection schedule. All examinations and tests listed in section 4 shall be successfully completed for acceptance of the FA. The examinations and tests may be conducted in any order with the exception of the following test. The following test shall be conducted in the sequence listed below. Note that the drop capability test must be repeated four times. Failure of any examination or test constitutes failure of FA.

4.5.5 Long term storage
4.5.6 Drop capability
4.5.4 Environmental exposure
4.5.6 Drop capability
4.5.2 Cycling
4.5.6 Drop capability
4.5.3 Stability
4.5.6 Drop capability
4.5.1 Capacity
4.4.6 Package size

4.2.2 Conformance inspection. All production tank assemblies shall be subjected to the Capacity test as specified in 4.5.1 with the stand time shortened to a minimum of (1) hour instead of ten (10) days. Failure of this test constitutes failure and rejection of the tank assembly. In addition, lot conformance inspections shall be conducted per 4.2.2.1.

4.2.2.1 Sampling. Lot size shall be a total of 30 tanks manufactured successively. Tests shall be conducted in accordance with 4.2.2.2 on a production tank selected at random by the

Government Quality Assurance Representative (QAR), or as directed by the Procuring Contracting Officer (PCO), from each lot upon completion of the entire respective lot.

4.2.2.2 Lot conformance inspection test schedule. The following tests shall be performed in the order listed on the randomly selected tank assembly. Failure of any test shall constitute failure of the lot conformance inspection and rejection of the entire lot.

4.5.6 Drop capability
4.5.2 Cycling
4.5.6 Drop capability
4.5.3 Stability
4.5.6 Drop capability
4.5.1 Capacity
4.4.6 Package size
4.5.7 Tank assembly weight

4.3 Materials - examinations & tests.

4.3.1.1 Puncture resistance. Puncture resistance testing of the tank and ground cloth material shall be in accordance with ASTM-D751. Nonconformance to 3.3.1.1 shall constitute failure of this test.

4.3.1.2 Ozone resistance. Ozone resistance testing of the tank, valise and ground cloth material shall be as specified in ASTM-D1149, test specimen B. The specimens shall be conditioned for at least 14 days at a temperature of 104 ± 4 °F in air having a partial pressure of ozone of 50 millipascals. Any visible cracks under 7X lens shall constitute failure of this test.

4.3.2 Potability. Certificate of conformance with NSF Standard 61 shall be provided for all surfaces of the tank assembly that contact the drinking water. Certification of conformance for surfaces not as specified shall constitute failure of this examination.

4.3.3 Material deterioration prevention and control. Materials not as specified in 3.3.3 shall constitute failure of this examination.

4.3.4 Recycled, recovered, or environmentally preferable materials. Materials not as specified in 3.3.4 shall constitute failure of this examination.

4.3.5 Material imperfections. Materials not as specified in 3.3.5 shall constitute failure of this examination.

4.3.6 Chemical resistance. Verification of the requirements of 3.3.6 shall be provided as a certificate of conformance. Certification of conformance not as specified shall constitute failure of this examination.

4.3.7 Tank assembly weight. The tank assembly packaged in the valise shall be weighed. Nonconformance to the requirements of 3.3.7 shall constitute failure of this test.

4.3.8 Taste and odor. Samples shall be immersed for 72 ± 2 hours in distilled water having a 0.2 parts per million of total available chlorine at the start of the test. The samples shall be large enough to expose 50 square centimeters of compound to one liter of chlorinated distilled water. The water shall be tested for taste and odor in accordance with procedures outlined in APHA Standard Methods for the Examination of Water and Wastewater, Parts 207 Odor, and 211B Taste rating scale. Nonconformance to the requirements of 3.3.8 shall constitute a failure of this test.

4.4 Construction – examinations and tests.

4.4.1 Inflatable compartments. The tank assembly shall be visually examined for air compartments. Nonconformance to 3.4.1 shall constitute failure of this examination.

4.4.2 Handles. The following test shall be performed on each type of handle on the tank and valise. A tension load shall be slowly and smoothly applied in a direction perpendicular to the plane of the handle assembly until the minimum load as specified in 3.4.2 is reached and maintained for one minute. Failure of the handle assembly to maintain the minimum tensile load for 1 minute shall constitute failure of this test. Any damage, permanent distortion, or separation of the handle assembly or tank/valise material shall constitute failure of this test.

4.4.3 Fittings. Fittings not as specified in 3.4.3 shall constitute failure of this examination.

4.4.4 Storage/carrying valise. The tank assembly shall be prepared for transfer by storing it in its carrying valise. Four operators shall carry the tank assembly by the valise handle(s) a minimum of 250 feet. Any one of the following shall constitute failure of this test: a) if the four operators cannot safely carry the tank the prescribed distance, b) if the tank touches the ground at any point while in transits, or c) if the tank is damaged.

4.4.5 Package size. A tank assembly shall be packed in its valise as required by 3.4.6. The envelope dimensions of the valise shall be measured in 3 dimensions. Nonconformance to 3.4.6 shall constitute failure of this test.

4.4.6 Sand. To verify conformance to 3.4.7, the tank assembly shall be tested IAW MIL-STD-810 Procedure II of Method 510. The tank assembly filled to 1500 ± 20 gallons shall be subjected to blowing sand condition for a minimum total of 60 minutes, 15 minutes per side. The first side shall be with the wind blowing towards the male discharge port, then rotate in 90 degree increments to the remaining three sides. The blowing sand concentration shall be maintained at 0.0623 ± 0.015 g/ft^3. The air velocity shall be 3540 ft/min for blowing sand. This test shall be repeated with the tank filled to 3000 ± 20 gallons. Upon test completion, the tank assembly shall be inspected for visible signs of damage and the interior of the tank shall be inspected for sand particles. Visual damage to the tank or sand inside the tank shall result in failure of this test.

4.4.7 Ground cloth. The ground cloth not as specified in 3.4.8 shall constitute failure of this examination.

4.4.8 Footprint. This examination may be conducted in conjunction with any other test or examination. Fill the tank to its rated capacity. Failure of the tank to comply with the footprint requirement as specified in 3.4.9 shall constitute failure of this examination.

4.4.9 Tank assembly. This test shall be conducted in the sequence as specified and repeated as specified.

STEP-1: A tank assembly shall be filled with 500 ± 20 gallons of water.
STEP-2: Water shall be sprayed on top of the tank at a rate of at least 4 gallons/minute for 25 minutes.
STEP-3: After the tank has been sprayed for the required time, a minimum two pint sample shall be extracted from the tank in accordance with 3.4.10.1.
STEP-4: Next, a minimum 2 gallon bucket shall be half filled with water to simulate the addition of disinfectants and cleaning agents to the tank. The bucket of water shall be poured into the tank (see 3.4.10.2). The water in the tank shall then be mixed for at least two minutes (see 3.4.10.2).
STEP-5: Repeat STEPs 1-4 with tank at fill heights of 500 and 1500 ± 20 gallons of water. If the test sequence has been conducted at 500 and 1500 gallons, go to STEP-6.
STEP-6: Fill the tank with 3000 ± 20 gallons of water. Repeat STEPs 2-3 and stop testing.

Any one of the following outcomes during testing shall constitute failure of this test.

a) Water on the exterior enters the tank during this test.
b) Inability to extract the prescribed water sample in one attempt.
c) Inability to simulate chemical introduction.
d) Inability to mix chemicals.
e) The operator had to stand or lean on the tank in order to perform any of the operations during the test.
f) The operator gets wet from water on the tank or in the tank as a result of performing any of the operations during the test (exclude water on the ground.)

4.4.10 Cleaning capability. The tank assembly shall be cleaned internally and externally in less than one hour by one operator. If the tank assembly cannot be cleaned as specified, it shall constitute failure of this test.

4.4.11 Cover or opening. If the tank has a cover or opening, the following test shall be required. This test shall be performed by one operator with less than 15 minutes of verbal training. Prior to the verbal instruction, the operator shall have had no experience with removing the cover or opening on the tank. The operator shall not lean or stand on the tank while attempting this test. This test may be performed in conjunction with 4.4.9. The operator shall remove the cover or open the tank in less than 3 minutes and then reinstall the cover or close the tank in less than 3 minutes. Repeat these procedures when the tank assembly is empty and at the following fill levels: 500, 1500 and 3000 ± 20 gallons of water. Inability of the operator to

perform any of the functions of this test in the prescribed time shall constitute a failure of this test. If the operator gets wet, stands on or leans on the tank it shall constitute a failure of this test.

4.5 Tank Performance.

4.5.1 Capacity. Fully deploy the tank outdoors in accordance with intended use and fill the tank with drinking water to a minimum of 150% of its rated capacity. Allow the tank to stand for at least ten (10) days. Attempts to reattach components or perform any level of maintenance during the test period is not permitted. Inspect the tank periodically and at the conclusion of the test. Since this test is being conducted outdoors, the last visual inspection may be extended beyond ten days if rain or high humidity precludes a visual examination for leaks. Any leakage, failure of the tank to remain sealed, tank delamination, or tank deformation shall constitute a failure of test.

4.5.2 Cycling. Fill the deployed empty tank with drinking water to a minimum of 125% of its rated maximum capacity. Filling shall be performed in accordance with intended use and shall be completed in under one (1) hour. The tank shall then be fully drained in under one (1) hour. Repeat the above ten (10) times. Tank assembly shall be monitored for signs of leakage during filling and draining. Any sign of leakage or the need for operator intervention other than valve operation shall constitute failure of this test.

4.5.3 Stability. Fully deploy the tank in accordance with intended use, with filler/discharge fittings located perpendicular to the direction of incline, on a 10% slope and fill with drinking water to a minimum of 110% of rated capacity. The tank shall be allowed to stand for a minimum of 3 days. Nonconformance to the requirements of 3.5.3 shall constitute failure of this test. Periodically during this test and at the conclusion of this test, the tank assembly shall be examined for leakage. Any evidence of leakage shall constitute failure of this test.

4.5.4 Environmental exposure. Fully deploy the tank in accordance with intended use and fill the tank with drinking water at a maximum temperature of 35° F to a minimum of 125% of its rated capacity. Allow the tank to stand for 24 hours with the water temperature at or below 35° F. Inspect periodically. Perform this same test again with the water temperature at or above 125° F. At any time during the test, any leakage, failure of the cover to remain sealed to the tank, or tank deformation shall constitute test failure. Conformance to the remainder of the requirements of 3.5.4 shall be verified by certificate of conformance.

4.5.5 Long term storage. Verify conformance to the requirements of 3.5.5 by certificate of conformance in addition to performing the following two tests.

The fully packaged tank assembly within its valise shall be subjected to a low temperature environment of at or below -28° F for a period of 24 hours. The ambient temperature shall then be increased to no more than -25° F, for an additional 24 hours. At the end of this period, while still at or below –25° F, the tank shall be unfolded in not more than 30 minutes. The tank assembly shall be removed from the low temperature environment. The tank shall be filled to

125% of capacity with drinking water. Any flaking, cracking, or separation of the tank body material or leakage shall constitute failure of this test.

The fully packaged tank assembly within its valise shall be subjected to a high temperature environment of at least 180° F for a period of 24 hours. The ambient temperature shall then be decreased to no less than 140° F for an additional 24 hours. At the end of this period, with the ambient temperature at or above 125° F, the tank shall be unfolded in not more than 30 minutes. The tank assembly shall be removed from the high temperature environment. The tank shall be filled to 125% of capacity with drinking water. Any flaking, cracking, or separation of the tank body material or leakage shall constitute failure of this test.

4.5.6 Drop capability. A package valise shall be dropped from a height of at least six (6) feet on to a concrete floor. The lowest point of the valise shall be at least six (6) feet from the impact surface prior to free fall. The valise shall then be opened and the assembly visually inspected for damage. Any visual evidence of damage shall constitute failure of this test.

4.6 Repair kit. Repair kit not as specified in 3.6 shall constitute failure of this examination.

4.7 Identification marking. Marking not as specified in 3.7.1, 3.7.2, and 3.7.3 shall constitute failure of this examination.

4.8 Manpower requirement. Verify conformance to the requirements of 3.8 by demonstration and certificate of conformance. Successful completion of other tests and examinations in accordance with 4.1a and 4.1b may be used as reference data in meeting the requirements of 3.8.

4.9 Tools requirement. Verify conformance to the requirements of 3.9 by demonstration and certificate of conformance. Successful completion of other tests and examinations in accordance with 4.1a and 4.1b may be used as reference data in meeting the requirements of 3.9.

4.10 Color. Color not as specified in 3.10 shall constitute failure of this examination.

5. PACKING

5.1. Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of material is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

6.1 Intended use. The tank is intended for use as a drinking water storage container when quick storage facilities are needed, where permanent drinking water storage facilities are not available, for temporary storage of drinking water and use with U.S. Army tactical water purification equipment. The tank is intended to provide at least 3 years of service life and 10 years of storage life.

6.2 Acquisition requirements. Acquisition documents will specify the following:

a. Title, number, and date of this publication

b. Issue of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2 and 2.3)

c. When a First Article is not required or the time frame for submission of the first article (see 3.2)

d. The color required (see 3.10)

f. Level of packing required (see Section 5)

6.3 Date Requirements. The contracting officer should include requirements for such data as technical publications, instructional materials, illustrated parts lists, and the contractor's maintenance and operation manuals to be furnished with each tank.

6.4 First Article. When a first article inspection is required, the item should be initial production model. The First Article should consist of one unit. The Contracting Officer should include specific instructions in acquisition documents regarding arrangements for examinations, approval of the First Article Test results, and disposition of the First Article. Solicitations should provide that the Government reserves the right to waive the requirement for First Article inspection to those offerors proposing a product that has been previously acquired or tested by the Government, and that offerors proposing such products, who wish to rely on such a production or test, must furnish evidence with the bid or proposal that prior Government approval is presently appropriate for the pending contract. Offerors should not submit alternative proposals unless specifically requested to do so in the solicitation.

6.5 Definitions. The following definitions apply for this specification.

6.5.1 Recovered materials. Recovered materials are those that have been collected from solid waste and reprocessed to become a source of raw materials, as distinguished from virgin raw materials.

6.5.2 Blister. A blister is a void or hole causing a protrusion on the coated fabric surface when hot. It may not show when cold, and may be covered when open.

6.5.3 Holiday. A holiday is an area in the coated fabric not covered by coating compound.

6.5.4 Pinhole. A pinhole is a minute, circular void or a solvent blow hole.

6.5.5 Leak. The passage of drinking water or any added chemicals, from the interior to the exterior. Detection by any physical means, to include visual manifestations shall be considered prima facie evidence that leakage has occurred.

Preparing activity for this performance specification is: The U.S. Army TACOM Life Cycle Management Command.

Custodian:

Army – AT

Navy - YD

Review activities:

Navy – YD

Preparing activity:

Army - AT